98/

Scott. II—48—21,640-19-1-17.

P.W.(1918) Department.

Misc SERIES.

G.O. No.	225-I
DATED	25.6.18

Projects Tanks.

INDEXED.

[Despatch Abstract.]

Improvements to the left flank weir of No. 24 Paravai Kanmoi, Periyar System. According sanction to an estimate of Rs ~~2100~~ 2294 for works towards ——— Madura Division.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

C.F.—14.

CURRENT FILE.

1 17.

1

C.F.- 31.

Public Works DEPARTMENT,

PUBLIC WORKS DEPT. MADRAS 16 APR 1918 NO. 2397/18 B GOVERNMENT

Received .... 191 . Registered .... 191 .

Subject.

Improvements to the weir at the left flank of Paravai tank. Forwarding for sanction of Government estimate for ——

ENCLOSURES. 2
No. 1 Estimate with duplicate
1 Plan M. No 17/1918
Spare copies

Sent separately.

No. 473 CE

Station Trichinopoly , Dated the 11th April 1918.

From (Name) ~~E. HAWKINS Esquire, M.I.C.E.,~~

(Designation) Superintending Engineer, VI Circle.

To The Chief Engineer for Irrigation,
Madras.

Sir,

I have the honour to forward herewith for your approval and sanction of Government an estimate amounting to Rs.2040 for the construction of apron and retaining wall for a portion of the escape at the left flank of Paravai kanmoy, a tank to be maintained in the Periyar system with reference to G. O. No.710 I dated 19th August ~~1918~~. 1896

2. The proposed improvements are shown on plan M.17 of 1918.

3. The Executive Engineer, Madura Division has been directed to report the approximate cost of the portion of the escape

2

escape xxxxxked damaged and now proposed to be improved, in order that the amount may be written back from the capital to the Revenue account of the Periyar system with reference to P. W. D. Code para 1921.

4. The work will be completed before the end of 31st March 1919.

5. As the materials are to be carted before water is let down the channels and the work is to be completed before the next rains, I request that permission may be granted to put the work in hand in anticipation of sanction of the estimate. It has been pointed out to the Executive Engineer that there is no apparent reason why the estimate should not have been prepared in time to await formal ----- sanction.

I have the honour to be,

Sir,

Your most obedient servant,

Sd/. P. Hawkins,

8-4-18,

Superintending Engineer, VI Circle.

Alex Young Staff Sergt,

For Superintending Engineer,

VI Circle.

10/4/18

10/4.

Report to accompany the estimate for Improvements to the left flank weir of No.24 Paravai Kanmoy.

Amount of Estimate. .. Rs.2040.

Go 117³
21.2.13
H.N

An estimate for Improvements to Paravai Kanmoy amounting to Rs.5000 was sanctioned in C.R.No.367 of 12-13 and completed in 1915 with a total expenditure of Rs.4293. This estimate provided for the construction of masonry aprons 15 feet wide with proper retaining wall in place of the old apron which had collapsed for a length of 115 feet in the centre of the weir and for the - extension of the old masonry apron on the right side only by 6½' but on a lower level to make up the full width of 15' adopted for the new apron and for the construction of a second sloping apron of dry stone packing for a total length of 205' and width of 15' as shown in plan.

2. At the time the above estimate was prepared and carried out, the old apron in rear of the weir on its left side for a length of 95' was apparently in good condition and as the ground in rear was also very high as shown by the old C.S. at the site marked in blue lines in C.S.No.1 no improvements were carried out to this portion of the apron and it was left as it was.

3. But during the heavy rains of 1915 and 1917 when the tank surplussed very heavily, the high ground in rear of this - portion of the tank which consisted of a mixture of sand and saline clay gradually got scoured to a depth of 3' to 4' as indicated by the levels on the site survey and the old masonry apron entirely collapsed for want of proper foundations to the retaining wall. The loose stones of the collapsed apron now form a sort of protection to the weir but it is quite likely that the ground in rear will get scoured much deeper in another heavy flood especially as the deep bed of the Kondamari Odai which is close by and into which the surplus flows is nearly 3' lower than this level and the foundations of the weir will be undermined.

4. It is therefore proposed to rebuild the masonry apron on a lower level with a proper retaining wall and a second sloping apron on the same design as the one adopted for the other portions of the - weir as per improvements carried out in 1914 & 1915 under the - sanctioned estimate above referred to, but with the following slight

modifications with a view to economy as shown in plan:-

(a) Instead of constructing the 1st apron of random rubble in ~~mx~~ mortar as per improvements already carried out, it is proposed to build the retaining wall only of random rubble in mortar and to build the apron which is 2' thick of rough stones packed dry and to grout the interstices thoroughly with surki concrete and point the joints with cement to a depth of 3".

(b) The concrete foundation 1½' deep below the 1st apron has also been omitted and replaced by a gravel foundation 12" thick well watered and rammed. The concrete foundation~~s~~ below apron appears to be unnecessary when the foundations of the retaining wall have been taken sufficiently deep into the hard sub soil, especially in this portion of the weir where the ground in rear has not scoured below the bottom level of the proposed apron as was the case at C.S.3 when the original improvements were carried out, and the foundation of 12" gravel proposed will be sufficient to prevent the apron from sinking.

(c) The concrete foundation below the second apron is also omitted for the same reasons; this 2nd apron which will be nearly 1½ to 2' below existing ground level may not be immediately - necessary but is proposed to be built now to meet the future - contingency of which there is every probability.

5. The rates provided in the estimate are as per current - schedule of rates except for rough stones for which an extra rate of Re.1/- per 100 c.ft. is provided over the schedule rate as specially selected big sized stones are required for the work which have to be split from big boulders.

6. The work is proposed to be carried out during the next closure as it is not advisable to leave the weir as it is for another rainy season.

16/3/47

Executive Engineer,
Madura Division.

15/3/48

5

~~No.~~ 2397/18-B-18 24.4.18

No call

Memo

With reference to his letter (para 59) ~~No.~~ No. 473 CE of 11.4.18 forwarding for sanction an Estimate amounting to Rs 20,100 for improvements to the weir at the left flank of the Paravai Kanmoy, the SE VI circle is informed that the work may be put in hand in anticipation of sanction to the estimate.

p2 cf

[illegible] 17/4/18

[illegible] 18.4.18

WH 11.4.18

Typed by [illegible]
Read by [illegible]
[illegible] 24.4

To
The SE VI circle

Emi nil TSD
17 4 18

[illegible] 25.4.18

6

Public Works Department.

CE Subject:-- Improvements to the left flank of Paravai kanmoy.

No 734 Madura dt

1426.18

Trichinopoly No.
Dated 17th June 1918.

From

P. HAWKINS Esquire, M.I.C.E.,
Superintending Engineer,
VI Circle.

To

The Chief Engineer for Irrigation,

Madras.

2397/18

MADRAS 18 3720/18

Sir,

In continuation of this office Noo.473 C. E. dated 11th April 1918 and 698 C. E. dated 11th June 1918, I have the honour to report that the approximate cost of the damaged portion of the weir is Rs.250.

The portion damaged is about 20 units of roughstone apron and at present rate, viz., Rs.17-8-0 per unit. would amount to Rs.350. But at the time of construction labour and

and materials were much cheaper.

I have the honour to be,

Sir,

Your most obedient servant,

Alex Young Staff Sergt,

For Superintending Engineer,

VI Circle.

17/6/18

Scott. II-8 (f)—3,505—27-1-16.

From the S.E. No 1 of 11.4.18 No. 473 CE
To — do — 2397/1873-1 of [illegible]
From — do — 734 CE/17.6.18.

Endorsement 2397/1873-2 of [illegible]

Note by the Chief Engineer

for Irrigation.

Submitted to government with the recommendation that in the circumstances explained in the report accompanying the S.E's first letter read above, the estimate for improvements to the left flank weir of Paravai Kannoy ~~tank~~, a Periyar-affected tank in Madura District, as altered to Rs ~~2,100~~ 2,100, may be sanctioned.

2. In view of the urgent nature of the work, the S.E has been authorised to put the work in hand in anticipation of sanction.

[signature] 21/6

22.6.18

To

The Joint Secretary to Govt:

P.W.D. Irrigation.

C.E.—48

NOTES.

2397
18

pp 1-4 C.f.

Improvements to the weir at the left flank of Paravai Kanmoy. Periyar System.

From the SE NI of 11.4.18 No 473 CE

Dee

E.I. Submitted for orders whether the Estimate may be checked for sanction. The tank is a Periyar affected one and is also a railway affecting tank. The necessity for improving a portion of the weir is explained in the report accompanying. A description of the tank will be found on pp 2-3 of G.O. 117 I of 21.2.1913.

2. As the improvements will add to the capital value of the System, the amount of the Estimate is chargeable to the open capital account of the System. The S.E. [the E.E. Madura Dn has been asked to report] states that the estimated cost of the portion of the escape to be replaced, with reference to paragraph 1921 of the P.W.D. Code. The information may be awaited.

3. The S.E. for the reasons stated in paragraph 5 of his letter, requests permission to start the work in anticipation of sanction. In view of the urgent nature of the work, permission may, it's submitted, be granted. A draft memo is accordingly put up for approval and orders to issue.

TSD 17.4.18 Mess 17/4/18

18-4-18

WH 11.4.18

4.10 P.M.
(1) Issue
(2) T Section

D.E.I.

E.1.

Heal N

Page 3. C. f

Vide Plan M No 17/1918

The papers relate to improvements to the left flank weir of No 24 Paravai Kanmoy, a Periyar affected tank in Madura District.

2. An estimate amounting to Rs 5,000 was sanctioned for improvements to the above tank in G.O.No 117 I dated 21-2-1913 and the work was completed in 1915. As the old apron in rear of the L weir on its left side for a length of 95 ft was apparently in good condition and as the ground in rear was also very high, no improvements were then proposed to this portion of the apron. It is stated that, during the heavy rains of 1915 and 1917 when the tank surplussed heavily, the high ground in rear (of this portion of the tank bund) which consisted of a mixture of sand and saline clay got gradually scoured and the old masonry apron entirely collapsed for want of proper foundations to the retaining wall.

3. As it is likely that the ground in rear will get scoured much deeper in another heavy flood and that the foundation of the weir will be undermined thereby, especially as the deep bed of the Kondamari Odai (which runs closeby and into which the tank surpluses) is 3 feet lower than the ground level, it is now proposed to rebuild the masonry apron on a lower level, with a proper retaining wall and a sloping second apron; ~~according to~~ according to the design adopted for the improvements carried out to the weir in 1915 but with the undermentioned modifications.

Page 4 C. f

(1) 1st apron. Instead of constructing the masonry apron with random rubble in mortar as per the improvements carried out in 1915 it is proposed to build the apron with 2' thick roughstone packed ~~of roughstone packed dry~~ and to grout the interstices with surki concrete and to point the joints with cement.

Cement pointing might be omitted. Yes

Foundation for the 1st apron. Instead of 18" concrete used for the improvements carried out in 1915, the S.E proposes to allow 12" gravel for the reason that the ground in rear has not been scoured below the bottom level of the proposed apron and that the retaining wall is proposed to be taken sufficiently deep into the hard sub-soil (hard clay). The ×design shows that the concrete foundation of the 1st retaining wall will be taken down 1 foot into the hard clay staratum i.e. to + 91.00.

× Plan M. No. 17/1918

(2) 2nd apron. Concrete foundation has now been proposed to be entirely omitted for the same reasons as those given in the case of the 1st apron.

Page 4 C. f

4. The proposals do not appear to call for any remarks.

5. Rates. These are supported by detailed data and fairly agree with schedule of rates of the Madura Division for 1918-19. In the case of the rates for conveyance of materials, the estimate rates appear slightly less than the schedule ones. However any excess likely to occur under " conveyance of materials" may be met from "Unforeseen and Contingencies"

Unforeseen.

2397/18

Unforeseen. No provision has been made for unforeseen in the estimate. A sum of Rs 60 may if approved be allowed.

6. The estimate with the above alterations will amount to Rs 2,100.

7. A draft E, I. note is submitted for approval.

Better make 5% of 1893 or say Rs 95

With one plan

Thro B

8. The S.E. reports that the approximate cost of the portion of the escape proposed to be replaced, is Rs 250. This amount is debitable to the revenue account of the Periyar System. A draft order sanctioning the estimate is also put up which may if approved issue.

From S.E. VI of 17.6.18 No. 734 C.E. (pp. 6-7) f.

T.S.H. 19.6.18.

This small est. for an urgent work should not have taken 2 months to check

21/6

22.6.18

FEJ

Please see paragraph 3 of S.E.'s letter p. 1 of the S.E. has been reminded (4.5.18). Draft order can be put up only on receipt of information of the cost of the escape to be replaced.

22/6/18

Improvements to the left flank main of No. 24. Paravai Kanmoi Periyar System. According sanction to an estimate of Rs ~~2100~~ 2294 for works towards — Madura division.

II—10 (a)

P.W. (Irrig.) DEPARTMENT.

Projects –
Tanks

[READ] AGAIN G.O. No. 117 I, dated 6th N 21. 2. 1913.

" " " ..., " ... 19 .

[READ] ALSO :—

C. No. 2397/18B, From the Chief Engr for Irrg. Cmt, No. 2397/18B, dated -6- 1918.

" " ..., " " ..., " ..., " ... 19 .

" " ..., " " ..., " ..., " ... 19 .

ORDER. Misc No. 225-I, dated 25. 6. 1918.

The following estimate is sanctioned:—

Irrigation.

Periyar System.

Improvements to the left flank main of No: 24. Paravai Kanmoi Madura Division Plan M No. 17/1918

(i) Imperial

49. capital expenditure not charged to revenue

Open capital account

Unremunerative work

I Works.

3. Distributories

C. Masonry works.

Estimate

Verified 26-6-18.

Tabulated

Td CS
Rd Res
No Fd
Tabulated [illegible]

Enclosures separated & put up.

CS 27/6

CS [illegible] 27-6-18

Estimate Rs

I Works. 1,850

II Establishment. ~~398~~ 398

Total 2,248

(ii) Divided Head

42 - Major works (working Expenses)

1. Extensions & Improvements

3. Distributaries

C Masonry works.

Estimate Rs 250.

2. The sanction accorded in paragraph 1 above is registered as No 28 I of 1918 - 1919 and will [illegible] expire on 31. march 1919.

3. The action of EE in having authorised the SE to put the work in hand in anticipation of sanction to the estimate is approved.

[illegible] 19/6/18.

[illegible] 21/6/18

[illegible] 22.6.18

1850
416
28
2294

490 1850
42 ER 250

Vide G.O. No 341 I 22.10.18

DESPATCHED
Date 29.6.18
Mess & Stamp

To be separated [illegible]

2

The SE VI circle with 1 estimate & 1 plan No. 17 / 1918

The A.G. Madras

1880
1806-18

[W]hen given for copying
[W]hen copied ________ } 191 .
[W]hen examined ________
When signed ________

READ AGAIN G.O. No. , DATED 191 .

CURRENT No.

ENCLOSURES TO C. No.

ORDER OF GOVERNMENT .. .. .. A A A A A A A

LETTER OF GOVERNMENT.

STATEMENT WITH DITTO.

PAPERS NOT FILED UP, BEING MEANT FOR DESPATCH IN ORIGINAL.

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